

REMARKS

Claims 1-7 are pending in this application. By this Amendment, claims 1-3, 5 and 6 are amended. In particular, claims 2 and 3 are rewritten in independent form. The specification and Fig. 11 are amended.

I. The Drawings Satisfy All Requirements Under 37 C.F.R. §1.83(a)

The Office Action objects to the drawings. This objection is respectfully traversed.

The Office Action asserts that "the first partial buried region" and "the second partial buried region" recited in claim 3 are not shown in the drawings. However, the first and second partial buried regions are shown in Fig. 4 as elements 221a and 222b, respectively, and described in paragraph [0046] of the specification.

For at least the above regions, withdrawal of the objection to the drawings is respectfully requested.

II. Claims 2, 3, 5 and 6 Satisfy All Requirements Under 35 U.S.C. §112, Second Paragraph

The Office Action rejects claims 2, 3, 5 and 6 under 35 U.S.C. §112, second paragraph. This rejection is respectfully traversed.

The Office Action asserts that the limitation "a lower region" recited in claim 2 is not shown in the drawings. Fig. 11 and paragraph [0087] are amended to add reference number 210b¹ to denote a lower region to overcome the rejection of claim 2. No new matter is added, because the limitation "a lower region" was originally described in the specification in paragraph [0087].

The Office Action asserts that the limitation "the first partial buried region" recited in claim 3 is not shown in the drawings. However, as discussed above, the limitation "the first partial buried region" is shown in Fig. 4 with reference number 221a, and described in the specification at paragraph [0046]. Thus, the rejection of claim 3 is improper.

The Office Action also rejects claims 3, 5 and 6 for lack of antecedent basis. Claims 3, 5 and 6 are amended to overcome this rejection.

In view of the above, withdrawal of the rejection of claims 2, 3, 5 and 6 under 35 U.S.C. §112, second paragraph is respectfully requested.

III. The Terminal Disclaimer Overcomes the Double Patenting Rejection

The Office Action provisionally rejects claims 1-7 under the judicially created doctrine of obviousness-type double patenting over claims 1-7 of co-pending Application No. 10/790,868. A Terminal Disclaimer is concurrently filed herewith to overcome this rejection. Accordingly, withdrawal of the provisional obviousness-type double patenting rejection is respectfully requested.

IV. Konishi Does Not Qualify as a Prior Art Reference

The Office Action rejects claims 1-7 under 35 U.S.C. §102(e) over U.S. Patent Publication No. 2004/0235261 to Konishi et al. However, Konishi does not qualify as a prior art reference.

Konishi has a filing date of February 12, 2004. However, the present application claims benefits of a priority document, JP 2003-062820 that is filed March 10, 2003. Thus, the present application has a priority date earlier than the filing date of Konishi.

A certified copy of the priority document was submitted to the Patent Office on March 3, 2004. Applicant will submit an English-language translation of the priority document if the Examiner so requests.

In view of above, withdrawal of the rejection of claims 1-7 under 35 U.S.C. §102(e) is respectfully requested.

V. Claim 1 is Patentable Over Diericks

The Office Action rejects claim 1 under 35 U.S.C. §102(b) over U.S. Patent Application Publication No. 2001/0011736 to Diericks. This rejection is respectfully traversed.

The Office Action asserts that Diericks discloses all elements recited in claim 1. However, Diericks does not disclose or suggest an insulated-gate clear transistor that discharges, during a discharging period, the carriers accumulated in the accumulation region and that discharges, during an accumulation period, spilled carriers that exceed a capacity of the accumulation region, as recited in claim 1.

Diericks discloses a device having a transistor that discharges carriers accumulated in an accumulation region. See paragraph [0073]. However, Diericks does not disclose or suggest a device that discharges carriers differently in different periods. Thus, Diericks does not disclose or suggest an insulated-gate clear transistor that discharges, during a discharge period, the carriers accumulated in the accumulation region and that discharges, during an accumulation period, spilled carriers that exceed a capacity of the accumulation region.

For at least the above reasons, Diericks does not disclose each and every element recited in claim 1. Withdrawal of the rejection of claim 1 under 35 U.S.C. §102(b) is respectfully requested.

VI. Claim 1 is Patentable over Miida and Takizawa

The Office Action rejects claim 1 under 35 U.S.C. §103(a) over U.S. Patent Publication No. 2002/016703 to Miida in view of JP 2002-111960 to Takizawa. This rejection is respectfully traversed.

The Office Action acknowledges that Miida does not disclose or suggest a transistor that discharges carriers accumulated in an accumulation region, but asserts that Takizawa discloses this feature. However, Takizawa does not disclose or suggest an insulated-gate

clear transistor that discharges, during a discharge period, the carriers accumulated in an accumulation region, and that discharges, during an accumulation period, spilled carriers that exceed a capacity of the accumulation region, as recited in claim 1.

Takizawa discloses a device having a switching transistor 52 that discharges accumulated carriers. See Abstract and Fig. 1. However, Takizawa does not disclose or suggest an insulated-gate clear transistor that discharges, during a discharge period, the carriers accumulated in an accumulation region and that discharges, during an accumulation period, spilled carriers that exceed a capacity of the accumulation region. Therefore, Takizawa does not supply the subject matter lacking in Miida.

For at least the above reasons, Miida and Takizawa do not disclose or suggest the subject matter recited in claim 1. Accordingly, withdrawal of the rejection of claim 1 under 35 U.S.C. §103(a) is respectfully requested.

VII. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-7 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Replacement Sheet
Terminal Disclaimer

Date: May 23, 2005

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Amendments to the Drawings:

The attached replacement drawing sheet makes changes to Fig. 11 and replaces the original sheet with Fig. 11.

Attachment: Replacement Sheet